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International Accounting Standards Board

INFORMATION FOR OBSERVERS

Board Meeting:	**22 June 2007, London**
Project:	**Extractive Activities research project**
Subject:	**Possible building blocks for a current value accounting model for minerals and oil & gas reserves and resources (Agenda Paper 15B)**

Purpose

1. This paper identifies, based on a review of the user survey responses, some possible building blocks for a current value accounting model of minerals and oil & gas reserve and resource assets.

Building blocks for a current value measurement model

2. The results of the user survey suggest that there is limited support for either fair value or current value accounting for minerals or oil & gas reserves and resources. In spite of this, the project team feels it is important that the discussion paper that will be published at the conclusion of the research project should include a current value alternative. The purpose of the discussion paper is to consider alternatives and provide constituents with the opportunity to provide input prior to the Board developing an exposure draft dealing with the financial reporting of reserves and resources. (Agenda Paper 15C discusses another alternative that the project team consider should be included in the discussion paper.) There has been much discussion of the use of fair value in accounting in recent years. The project team is conscious that it has only met with sophisticated users and

that other users may have different views. The following paragraphs therefore begin to outline a current value model.

3. The research project team considers that the guiding principles of any current value measurement model for minerals or oil & gas reserves and resources should:

   (a) adhere to conceptual accounting principles;

   (b) contain as many attributes of fair value (as defined in FAS 157 *Fair Value Measurements*) as possible, but also addresses the difficulties with fair valuing reserves and resources that were identified at the October 2006 IASB meeting– primarily being the:

      (i) uncertainties inherent in the assumptions required to estimate the fair value of reserves and resources; and

      (ii) effort required (in terms of time and cost) to estimate fair value as at the reporting date for an entity's reserve and resource assets in time to meet financial reporting deadlines;

   (c) result in comparable and consistent financial reporting; and

   (d) satisfy cost/benefit considerations, noting that users appear to attach limited usefulness to a current value measurement of reserves and resources.

4. Key building blocks of a current value measurement model that are consistent with these guiding principles might include:

   (a) the minerals or oil & gas reserves and resources unit of account that will be valued should be narrowly defined;

   (b) a single measurement technique should be prescribed;

   (c) where practical, assumptions relating to market conditions should be standardised;

   (d) the initial recognition of the reserve and resource assets should coincide with the scope of the measurement base (i.e. if the scope of the measurement only includes reserves, then initial recognition should occur at the time of reserve recognition);

(e) costs incurred prior to the initial recognition of the reserve and resource assets should be expensed unless an asset would otherwise be recognised in accordance with the *Framework* or IFRSs (e.g. IAS 16 *Property, Plant and Equipment* or IAS 38 *Intangible Assets*); and

(f) the current value should generally only be assessed annually.

5. Please note that the guiding principles and building blocks presented in this paper have been proposed by the research project team for the purposes of starting the discussion on the design of a current value accounting model. Following this meeting, the research project team intends to commence consultations with users and its Advisory Panel on the design of a current value model.

Unit of account being measured

6. Estimating the fair value of a mineral or oil & gas property would require assigning a value to all the reserves and resources and any future exploration potential relating to the property. Depending on how the unit of account is defined, the fair value estimate may also incorporate any additional value attributable to infrastructure assets and/or other plant and equipment that is attached to the property. Compared with a fair value estimate, a current value estimate that narrows the scope of the asset to be measured may, to some extent, reduce the degree of uncertainty associated with the estimate as well as reduce the time and cost associated with preparing the estimate. The design considerations for a unit of account for a mineral or oil & gas property that is subject to current value measurement are:

(a) the categories of reserves and resources that should be reflected in the measurement; and

(b) other assets (e.g. development works, infrastructure assets), if any, that should be reflected in the measurement.

Categories of reserves and resources

7. Almost all of the analysts surveyed expressed concern with any attempt to place a value on reserves and resources that have a low confidence of future recovery or for which development and production of the property is not scheduled for some time. For this

reason, the research project team proposes that a current value measurement model should include only reserves with a given likelihood of production, and should exclude more speculative volumes. This is consistent with the focus of analysts generally being on either proved reserves or proved and probable reserves. For some mineral properties with reserves, some resources might also be included when it is only economic for the company to prove up a certain amount of reserves at any particular time.

8. For the purposes of this initial discussion, the research project team has chosen not to specify which categories of reserves (or reserves and resources) should be included in a current value measurement. This will be considered after further consultations with users and preparers.

Other assets

9. A current value estimate of specified categories of reserves would represent the value attributable to the development and production of those reserves. Consequently, the valuation would include the future cash outflows associated with future development and infrastructure costs. Where there is existing development or existing infrastructure, those assets could be separately recognised or recognised as part of the same unit of account as the reserves.

10. The survey revealed that many users do not believe that separate recognition of any development or infrastructure assets from the reserves and resources generally would provide additional decision-useful information. Users indicated that they generally consider the reserves, development and infrastructure to be a single asset for analytical purposes. Furthermore, some users suggested that valuing the minerals or oil & gas separately from the above-ground assets could be difficult, and that requiring large companies to separately identify such assets could also result in too much detail being provided. The valuation difficulty arises when all the assets that comprise a minerals or oil & gas property (i.e. the deposit, the development works and the infrastructure assets) only generate a single stream of cash flows. Consequently, the valuation of the separate assets would require valuing the entire property using the income approach and then subtracting the value of the separately recognisable assets (most likely the infrastructure assets) using either the cost or market approaches. This valuation approach is consistent with paragraph 25 of IAS 41 *Agriculture*, which explains that one way to determine the

fair value of a biological asset is to obtain a fair value for the combined asset of the biological assets, raw land, and land improvements and then subtract the value of the land and land improvements from the fair value of the combined asset.

11. In contrast, some users saw merit in separately recognising and measuring infrastructure assets and other plant. Separate recognition of assets was supported when those assets generated separate – and material – cash flows, such as a treatment plant that processes material from mines owned by other companies as part of a commercial arrangement. One analyst noted that separate recognition might be useful if the infrastructure asset is one of the property's most valuable assets (e.g. a railway for a coal mine) and potentially could be applied for use elsewhere. Lenders indicated that separate recognition of infrastructure or other separable assets (e.g. vehicles) would be useful because it identifies which assets are owned by the company and therefore might be sold off separately by the lender if the need arose. Unlike other users, however, lenders would be able to obtain this information directly from management if it is not available from the financial statements.

12. It was also explained that separate recognition would allow an analyst to differentiate between the value attributable to depreciating assets and the resource base. This is useful when the assets have a different useful life than the resource base. Another analyst suggested that separate recognition of development and infrastructure assets would provide useful information as these assets can have implications for royalty or Production Sharing Contract (PSC) obligations. However, this analyst indicated that these assets would need to be measured at historical cost as the royalty / PSC agreements use historical costs.

13. The unit of account that might apply to a fair value measurement model was briefly raised with the Board in October 2006, and some Board members expressed a concern that not separately recognising the infrastructure assets from the reserve and resource assets might be in conflict with other accounting standards such as IAS 16 and IAS 36. For the purposes of this discussion, the research project team has not proposed a definition for the unit of account that includes the reserves and resources. This would be the focus of a subsequent discussion.

Prescribing a single measurement technique

14. As discussed in Agenda Paper 15A, the research project team considers that current value would have to be estimated using an income approach. To ensure that the estimate is prepared on a consistent basis, the research project team suggests that one income approach should be selected and specified for use in estimating current value. This is consistent with the measurement approaches prescribed by FAS 69 *Disclosures about Oil and Gas Producing Activities* and Canada's National Instrument 51-101 *Standards of Disclosure for Oil and Gas Activities*, which are both based on discounted cash flow measurement techniques.

Standardised assumptions regarding market conditions

15. If a current value estimate is to be provided, most users wanted the current value, and the assumptions underpinning it, to be based on standardised assumptions in order to limit the extent to which companies make subjective forecasts of future conditions. This is consistent with the view that the analysts see their core competence in forecasting future conditions.

16. Differing views exist as to what the standardised parameters should be for the economic assumptions, but the general thrust of the comments were:

    (a) for commodity prices: use a historical average price or use a current market price;

    (b) for development and operating costs: use current costs; and

    (c) for discount rates: use a standardised discount rate or the company's weighted average cost of capital (but it would need to be disclosed).

17. For these assumptions, users are interested in comparability. Therefore, they seem more interested in having a company estimate the value of reserve and resource assets using objective inputs rather than the inputs that reflect the company's own view of the future. This is in contrast to the "through the eyes of management" approach that is being adopted in segment reporting under IFRS 8 *Operating Segments*.

18. The research project team notes that in some jurisdictions, reported reserves (or reserves and resources) volumes are determined according to realistically assumed forecast

economic conditions. The price and discount rate assumptions used in those reserves estimates are also not always disclosed. Although most users wanted standardised assumptions for the estimation of a current value, whether users wanted standardised assumptions to be applied to the reserves volumes estimate appears to be dependent on existing practice in their jurisdiction with regard to reporting reserves volumes – that is, whether forecast or standardised assumptions must be used. Using different price assumptions for estimating reserves volumes and values creates an inconsistency within the valuation estimate. For the purposes of this discussion, the research project team only wishes to identify the issue so that it can be earmarked for further consideration.

Initial recognition

19. If a current value estimate is to be provided, the majority of users indicated that they would favour the initial recognition of the minerals or oil & gas property assets at, or around, the time of declaration of a reserve or project approval. This view is also consistent with the view of many users that the measurement scope should involve the valuation of reserves (refer paragraph 7 above). There is less uncertainty associated with the recovery of minerals or oil & gas when a company declares a reserve or approves a project. This is because it has effectively communicated its decision to develop and produce the deposit. Also implicit with the decision is that the project will generate an economic return (otherwise a rational company would not invest in the project).

20. To reinforce the linkage between the current valuation and the accompanying disclosures, the research project team thinks that the threshold for initial recognition of the asset should be tied to the reserves and resources classification system (e.g. to the declaration of a reserve). The research project team acknowledges that this is not a conceptually pure outcome (based on either the existing *Framework* with its probable recognition threshold or the working draft revisions to the *Framework*), but it provides for a comparable test for initial recognition of an assets and the disclosure of reserve and resource volumes can provide some visibility of the asset being recognised and measured. Defining the point of initial recognition by reference to a "bright line" rather than the *Framework* also has disadvantages. It may have the (undesirable) consequence of accounting effects driving business decisions. For instance, some companies might accelerate the timing of a reserve declaration to bring forward the recognition of the

current value in their financial statements and thereby improve the appearance of their asset position. Similar consequential effects can arise irrespective of whether the asset is measured at current value or at historical cost, although the effect will be more pronounced in the case of a current value measurement basis as, at the time of initial recognition, the net asset position of the entity would increase by the amount of the asset valuation.

Costs incurred prior to initial recognition

21. The research project team proposes, as a building block of a current value measurement model, that any costs incurred prior to the initial recognition and measurement of the reserve and resource assets at current value should be expensed unless an asset would otherwise be recognised in accordance with IAS 16 *Property, Plant and Equipment*, IAS 38 *Intangible Assets*, other International Financial Reporting Standards, or the *Framework*.

22. Although expensing costs incurred pre-initial recognition would represent a significant change in existing accounting practice, it is considered to represent a simple and consistent accounting solution.[1] Consistency is provided by setting initial recognition of the minerals or oil & gas asset to an observable event, which as discussed above might be the declaration of a reserve. The accounting approach should be (relatively) simple to implement as pre-development costs would be expensed as incurred unless those costs would be recognised in accordance with other IFRSs or the *Framework*. For example, costs incurred to acquire mineral rights would be recognised as an asset in accordance with IAS 38. Similarly, equipment acquired for use during exploration and evaluation activities would be recognised in accordance with IAS 16.

Revaluation

23. The research project team proposes, as a building block of a current value measurement model, that the current value estimate of the unit of account should be:

    (a) re-estimated each annual reporting period; and

[1] A similar approach to accounting for pre-development costs has been proposed in the building blocks for a historical cost accounting model (refer Agenda Paper 15C).

(b) adjusted each interim reporting period if a specified event occurs. Subject to further research regarding the feasibility of making adjustments to the current value estimate for an interim reporting period, these specified events could include:

(i) asset acquisition or asset divestment;

(ii) asset impairment, in which case IAS 36 would apply to require the current value estimate to be written-down to the recoverable amount of the asset (noting that current value is a different measurement basis to the measurement bases required in IAS 36, which are 'fair value less costs to sell' and 'value in use');

(iii) reassessments (upwards or downwards) of the reserves and resources volume estimates for the unit of account that have been completed by the end of the interim reporting period; and

(iv) actual production that has occurred to the end of the interim reporting period.

24. Most users suggested that re-assessing the current value annually should be sufficient as this is consistent with existing practice in reserve and resource volume reporting. Valuing the asset more frequently was generally considered to be impractical – in terms of the availability of personnel, and the time and costs required. Valuing the asset less frequently, such as only when a significant event has occurred (which might include some of the events mentioned in paragraph 23), received minimal support.

25. It was noted that an annual re-assessment of current value would not provide timely information for interim reporting purposes, as the current value of the asset would remain constant even though the value of reserves would be affected by events that occur throughout the year (e.g. changes in commodity prices, operating costs such as fuel, additional information acquired through drilling). This may confuse less sophisticated users as the current value reported in interim periods would not be responsive to the events occurring during that reporting period, including the production of minerals or oil & gas for that reporting period. The adjusting events mentioned

above are therefore suggested to allow the asset measurement reported in interim reporting periods to be responsive to particular events.

QUESTIONS

Q1) Does the Board agree that a current value recognition and measurement model should be included as an alternative in the research project's discussion paper?

Q2) Does the Board agree that the proposed building blocks of the current value model are appropriate for commencing consultation with users, preparers and auditors on to the basic design of a current value accounting model?